

UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

ENTROPIC COMMUNICATIONS, LLC,

Plaintiff,

v.

CHARTER COMMUNICATIONS, INC.,

Defendant.

Civil Action No. 2:22-cv-00125-JRG

JURY TRIAL DEMANDED

[REDACTED]

**DEFENDANT CHARTER COMMUNICATIONS, INC.’S
OPPOSITION TO PLAINTIFF’S MOTION FOR LEAVE
TO SUPPLEMENT INFRINGEMENT CONTENTIONS**

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. LEGAL STANDARD	4
III. ARGUMENT	4
A. Entropic Failed to Comply with the Meet and Confer Requirement in Local Rule CV-7(h)	4
B. Entropic Has Not Demonstrated Good Cause To Supplement Its Infringement Contentions At the Advanced Stage Of This Litigation	5
1. Entropic Has Not Been Diligent In Investigating Its Purported New Infringement Contentions	5
2. Entropic Fails to Articulate Any Purported Importance for Excluding Its New Infringement Theory.....	8
3. Charter Will Be Prejudiced If Entropic is Granted Leave to Amend its Infringement Claims	9
4. There is No Availability for a Continuance.....	11
IV. CONCLUSION.....	12

TABLE OF AUTHORITIES

	<u>Page(s)</u>
<u>Cases</u>	
<i>Bowie v. Martin Transp., Inc.</i> , No. 2:14-CV-998-JRG, 2015 WL 12832561 (E.D. Tex. Apr. 23, 2015) (Gilstrap, J.)	5
<i>Cellular Commc 'ns Equip., LLC v. Apple Inc.</i> , No. 6:14-CV-251, 2016 WL 4211707 (E.D. Tex. Aug. 10, 2016)	9
<i>Mears Techs., Inc. v. Finisar Corp.</i> , No. 2:13-CV-376-JRG, 2014 WL 12605571 (E.D. Tex. 2014)	4
<i>O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.</i> , 467 F.3d 1355 (Fed. Cir. 2006)	4
<i>Oyster Optics, LLC v. Coriant (USA) Inc.</i> , No. 2:16-CV-01302-JRG, 2018 WL 11448685 (E.D. Tex. Jan. 8, 2018)	9
<i>Packet Intelligence LLC, V. Netscout Systems, Inc., et al.</i> , No. 2:16-CV-230 (JRG), 2017 WL 2531591 (E.D. Tex. Apr. 27, 2017) (Gilstrap, J.)	4, 8, 11
<i>Realtime Data, LLC v. Oracle Am., Inc.</i> , No. 6:16-cv-00088-RWS-JDL, 2016 WL 11702434 (E.D. Tex. Dec. 14, 2016)	10
<i>Revolaze LLC v. J.C. Penney Corp., Inc.</i> , No. 2:19-cv-00043-JRG, 2020 WL 2220158 (E.D. Tex. May 6, 2020) (Gilstrap, J.)	10
<u>Rules</u>	
Local Rule CV-7(h)	4, 5

Defendant Charter Communications, Inc. (“Charter”) submits this memorandum of law in opposition to plaintiff Entropic Communications, LLC’s (“Entropic”) motion for leave to supplement its infringement contentions in connection with its infringement claims for U.S. Patent No. 8,284,690 (the “’690 Patent”). *See* Dkt. 135 (under seal). Because Entropic never met-and-conferred with Charter prior to filing this motion, and because it seeks to prejudicially inject a new infringement theory under the guise of supplementation after the close of fact discovery, the Court should deny the motion.

I. INTRODUCTION

Entropic served its initial infringement contentions on the ’690 Patent on July 5, 2022 and has since supplemented its contentions on two separate occasions, with the latest supplementation on June 23, 2023. Charter did not oppose Entropic’s prior supplementation requests given that there was sufficient time remaining in fact discovery. Since June 23, 2023, Charter prepared its defenses based on Entropic’s second supplemental infringement theory for the ’690 Patent and conducted numerous party and third-party depositions with that understanding.

At the close of fact discovery, Entropic informed Charter that it intended to seek leave to assert a purported “minor supplementation” to its contentions for the ’690 Patent regarding “active probes” and “pre-equalization.” Mot. at 1; *see* Dkt. 135-1 (Ex. A to Mot.). The ’690 Patent is directed to a “receiver determined probe”; Entropic previously disclosed “active probing” as its theory of infringement for the ’690 Patent. Entropic never accused “pre-equalization” in any of its prior infringement contentions. Although Entropic confusingly refers to the probes that are used for “pre-equalization” as “active probes,” “pre-equalization” probes are distinct from the “active probes,” as evidenced by Entropic’s last minute attempted supplementation.

Not only is Entropic’s motion a belated attempt to introduce yet another infringement theory for the ’690 Patent, it also misstates that it learned “new information” on July 20, 2023.

Entropic relies upon the July 20, 2023 third-party deposition of CommScope, a CMTS¹ manufacturer, to contend that it learned for the first time that “active probes” were “available” to Charter to perform pre-equalization. Mot. at 3; *see also* Dkt. 135-2 (Ex. B to Mot.) (Entropic’s Proposed Suppl. Infringement Contentions), at 3, 8-9, 12-13.

However, since at least January 13, 2023, and no later than June 16, 2023, Entropic had more than sufficient information to pursue whether Charter uses pre-equalization. That is because Entropic relied upon a CommScope “E6000 CER-CCAP User Guide” (the “CommScope User Guide”) to question the CommScope witness regarding pre-equalization. *See* Ex. 1 (Ex. 2 to CommScope Dep.). As Entropic concedes, the CommScope User Guide was produced to Entropic in June 2023 (specifically June 15, 2023). *See* Mot. at 3; *see also* Margulies Decl., ¶ 4. Entropic provides no explanation for its failure to question any Charter witness regarding the CommScope User Guide.

Entropic further fails to disclose that on January 13, 2023, five months before the CommScope deposition, Charter produced manuals for the *same* CommScope product that contains the *same* information contained in the CommScope User Guide. Margulies Decl., ¶ 6. Entropic also fails to inform the Court that “pre-equalization” is required by the DOCSIS 3.1 specification, a publicly available technical specification that Entropic referenced in prior infringement contentions for the ’690 Patent, so Entropic knew about and could have disclosed this theory long ago.² *See* Dkt. 135-2 (Ex. B to Mot.). Yet, when Entropic deposed Charter’s

¹ A CMTS, which stands for Cable Modem Termination System, is a common piece of equipment in a Cable network.

² *See* Ex. 2 (Entropic’s Second Am. ’690 chart) (excerpting DOCSIS specification regarding “P-MAP” messaging).

engineers and corporate designees in late May and early June, it never questioned the witnesses specifically about pre-equalization.

In addition, on June 6, 2023 and again on June 16, 2023, Entropic incidentally elicited testimony from Charter designees that Charter uses pre-equalization. Given the breadth of information that has been available to Entropic since January 2023, it cannot credibly suggest that it learned “new information” regarding pre-equalization during the July 20, 2023 deposition that would warrant its eleventh-hour request to supplement its contentions for the ’690 Patent.

Because pre-equalization has not been accused by Entropic, Charter did not have an opportunity to develop the record regarding pre-equalization before the close of fact discovery and will be prejudiced if Entropic is permitted to proceed with its last-second supplementation. Entropic does not suggest, nor does it address, whether the parties can proceed on the current schedule while at the same time seek discovery on the newly asserted pre-equalization theory of infringement. Nor can it: fact discovery has closed (with limited exceptions as permitted by the Court, *see* Dkt. 138), the parties have exchanged opening expert reports, rebuttal expert reports are due in four days, on August 11, 2023, and dispositive and *Daubert* motions are due later this month, on August 28, 2023. Moreover, the parties are expeditiously proceeding to trial that is set to begin in just four short months, on December 4, 2023. Put simply, Entropic has failed to articulate good cause for the Court to grant it leave to supplement its infringement contentions as it relates to the ’690 Patent. The motion should be denied.

The motion should be denied for the added reason that Entropic failed to satisfy the Court’s meet-and-confer requirements. After Charter responded to Entropic via email that it would not consent to the “highly prejudicial supplementation” which would “leave Charter [] absolutely no time to prepare the factual record on this newly disclosed infringement theory,” Dkt. 135-1,

Entropic filed its motion that day and also served an expert report relying on the newly disclosed infringement theory. The motion is therefore not ripe for this Court's consideration.

II. LEGAL STANDARD

A party seeking to amend its infringement contentions may do so only "by order of the Court . . . upon showing of good cause." *Packet Intelligence LLC, V. Netscout Systems, Inc., et al.*, No. 2:16-CV-230 (JRG), 2017 WL 2531591, at *1 (E.D. Tex. Apr. 27, 2017) (Gilstrap, J.) (citation omitted). In this context, good cause "requires a showing of diligence." *Id.* (quoting *O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.*, 467 F.3d 1355, 1366 (Fed. Cir. 2006)). The Court may also consider additional factors, such as: "(1) the explanation for the failure to meet the deadline; (2) the importance of the thing that would be excluded if the proposed amendment is not allowed; (3) potential prejudice in allowing the thing that would be excluded; and (4) the availability of a continuance to cure such prejudice." *Id.* (quoting *Mears Techs., Inc. v. Finisar Corp.*, No. 2:13-CV-376-JRG, 2014 WL 12605571, at *1 (E.D. Tex. 2014)).

III. ARGUMENT

A. Entropic Failed to Comply with the Meet and Confer Requirement in Local Rule CV-7(h)

Counsel for Entropic has not complied with Local Rule CV-7(h) and thus, the motion is not ripe for the Court's intervention. In the "Certificate of Conference" accompanying its motion, Entropic represented that it "conferred with counsel via email for Defendant [sic] on July 21, 2023, and counsel for Defendant are opposed as to the disposition of the matters raised in the motion." Mot. at 7.

This is insufficient to satisfy this District's meet and confer requirements. For opposed motions, such as this one, Local Rule CV-7(h) requires "at a minimum, a personal conference, **by telephone or in person**, between an attorney for the movant and an attorney for the non-movant."

(emphasis added). Local Rule CV-7(h) continues that “[e]xcept as otherwise provided . . . , a request for court intervention is not appropriate until the participants have met and conferred, in good faith, and concluded, in good faith, that the discussions have conclusively ended in an impasse, leaving an open issue for the court to resolve.” It also provides that “[f]or opposed motions, correspondence, e-mails, and facsimile transmissions do not constitute compliance with the substantive component and are not evidence of good faith.” *See* Local Rule CV-7(h).

Here, the parties never participated in a personal conference by telephone or in person. Rather, after Charter responded by e-mail to Entropic and noted its preliminary basis for opposing a motion to supplement, Entropic made no further attempt to schedule a meet and confer and filed the motion. *See* Dkt. 135-1. Therefore, “it is very clear that the[] requirements [of Local Rule CV-7(h)] were not met prior to the filing of this motion,” and the motion is not appropriate for the Court’s adjudication. *Bowie v. Martin Transp., Inc.*, No. 2:14-CV-998-JRG, 2015 WL 12832561, at *1 (E.D. Tex. Apr. 23, 2015) (Gilstrap, J.) (finding “Court intervention is not yet appropriate” where the meet and confer “requirements were not met prior to filing” the motion, and stating that “[t]his Court takes very seriously the ‘meet and confer’ requirement prescribed by the Local Rules.”).

B. Entropic Has Not Demonstrated Good Cause To Supplement Its Infringement Contentions At the Advanced Stage Of This Litigation

1. *Entropic Has Not Been Diligent In Investigating Its Purported New Infringement Contentions*

Entropic states that it diligently sought to supplement its infringement contentions because it filed its motion on the day after it purportedly learned of “newly-available information” during the July 20, 2023 deposition of CommScope, *i.e.*, that active probing was available to perform pre-

equalization. Mot. at 3-4.³ This is not true. Entropic had sufficient information to seek leave to amend its infringement contentions well before July 21, 2023 and on this basis, the motion should be denied.

First, it is irrelevant that Entropic previously accused “active probing” in its prior supplemental infringement contentions because it has never before accused probing for “pre-equalization.” Although Entropic uses the term loosely, “active probes” are a specific type of probe defined in the DOCSIS specifications and Entropic previously accused probes that retrieve “MER” (or modulation error ratio) data. *See* Ex. 2 (Entropic’s Second Am. ’690 chart); *see also id.* at 4-6 (citing “CM-SP-MULPV3.1-I15-180509” DOCSIS 3.1 specification). However, the usage of probes for pre-equalization operate differently and fall under different aspects of the DOCSIS specification, which presents different issues for infringement. As such, Entropic cannot hang its hat on the previously disclosed “active probing” theory to suggest that supplementation of “pre-equalization” is appropriate.

Second, Entropic acknowledges that it had “ [REDACTED] ” since early June 2023 that “[REDACTED],” but was [REDACTED] [REDACTED] Mot. 3 & n.1 (Entropic stating that it received documents from CommScope on June 6, June 15, and June 23, 2023). This includes the CommScope User Guide, which was produced by CommScope on June 15, 2023, and which Entropic relied upon at the CommScope deposition to now contend that “[REDACTED].” Mot. at 3. Entropic does not explain why it failed to ask *any* Charter witness whether Charter uses or disables pre-equalization despite having this evidence for more than a month before the CommScope deposition.

³ Entropic's motion includes two sections titled "Analysis."

Third, on January 13, 2023, well before any technical witness depositions,⁴ Charter separately produced manuals that contain the same information that is contained in the CommScope User Guide, *e.g.*, [REDACTED]

[REDACTED]" Ex. 3 (excerpt from CHARTER_ENTROPIC00067870).

Entropic does not explain why it did not investigate its alleged claims of "active probe" use in pre-equalization after its receipt of these manuals on January 13, 2023, nearly six months ago. Nor does Entropic explain why it never asked Charter representatives about probes used to implement pre-equalization during *any* of the fifteen depositions it conducted of Charter designees.⁵

Fourth, Entropic's failure to diligently pursue this new infringement theory is apparent considering that Entropic incidentally elicited testimony confirming that Charter uses pre-equalization during the depositions of Steven Williams and William Berger, dated June 6, 2023 and June 16, 2023, respectively. Ex. 4, Williams Dep. (Jun. 6, 2023) Tr. at 115:5-16 ("[REDACTED]
[REDACTED]
[REDACTED]"); Ex. 5, Berger Dep. (Jun. 16, 2023) Tr. at 26:7-11 (describing [REDACTED]). Notwithstanding this testimony, Entropic made no subsequent effort to clarify or seek further information from Charter regarding the probes in connection with pre-equalization.

Fifth, even when generously assuming that Entropic somehow overlooked all this evidence, Entropic was not diligent for the additional reason that it should have known about the pre-

⁴ Entropic deposed two Charter witnesses in December 2022 in connection with venue-related discovery, for a total of seventeen total depositions to date.

⁵ There is no doubt that Entropic saw these manuals because (1) on May 31, 2023, Entropic questioned a Charter designee regarding [REDACTED], and (2) on or before July 18, 2023, Entropic requested that Charter re-produce certain documents as color copies, including this specific document. *See* Margulies Decl. ¶¶ 6, 10.

equalization requirement from the DOCSIS standards that it cites in its prior contentions. The DOCSIS standards are central to the operation of cable networks in general and have been cited in the '690 Patent contentions. *See* Ex. 2 at 3-6, 10-11 (citing CM-SP-MULPIv3.1-I15-180509 DOCSIS standard). In the DOCSIS 3.1 physical layer specification, the standard states that “[a] CM [cable modem] MUST implement a pre-linear pre-equalizer” and “[t]he CMTS MUST be able to direct a CM TO pre-equalize.” *See* CM-SP-PHYv3.1-I07-150910,⁶ § 7.4.17. It further states that “[t]he CMTS uses the CM’s probe signal for pre-equalizer coefficient updates.” *Id.* Although this suit has been pending for over a year, Entropic failed to use this important evidence to pursue a pre-equalization theory of infringement.

Entropic had ample time to investigate, discover, and seek to assert its “new” theory of infringement, but failed to do so. Accordingly, Entropic has not “acted diligently in investigating” whether pre-equalization used by the CommScope E6000 CMTS infringes the '690 patent. This fact weighs against supplementation, and the Court should reject Entropic’s last minute attempt to infuse a new theory of infringement after the close of fact discovery. *Packet Intelligence*, 2017 WL 2531591, at *1 (denying motion to supplement infringement contentions, finding plaintiff did not act diligently “in investigating” infringement theory and stating plaintiff did not “sufficiently explain” why alleged infringing conduct “could not have been discovered earlier”).

2. *Entropic Fails to Articulate Any Purported Importance for Excluding Its New Infringement Theory*

Entropic fails to put forth *any* argument regarding the importance of its request to supplement its infringement contentions at this juncture. This alone should weigh against granting Entropic leave to amend.

⁶ Available at <https://community.cablelabs.com/wiki/plugins/servlet/cablelabs/alfresco/download?id=d2eb7f4e-5966-4023-99f5-6e44a812abca> (last accessed Aug. 7, 2023).

To the contrary, Entropic suggests that it “only seek[s] to **add** additional information . . . in support of the theory previously disclosed in Entropic’s Infringement Contentions.” Mot. at 4-5. However, there have been no “allegation[s] that [Entropic’s] prior infringement contentions were insufficient or in need of clarity,” and if it is true that “this additional language does not assert a new infringement theory,” which Entropic suggests here, “but merely clarifies [Entropic’s] prior infringement theories, it is difficult to see how the proposed supplemental language could be particularly important.” *Cellular Commc’ns Equip., LLC v. Apple Inc.*, No. 6:14-CV-251, 2016 WL 4211707, at *3 (E.D. Tex. Aug. 10, 2016). This factor weighs against the Court granting Entropic leave to further supplement its infringement contentions.

3. *Charter Will Be Prejudiced If Entropic is Granted Leave to Amend its Infringement Claims*

Entropic states that Charter will not suffer prejudice if it is permitted to supplement its contentions because “the specific ‘active probe’ was already part of” Entropic’s infringement contentions, and Entropic “merely seeks to . . . identify a further use of that ‘active probe.’” Mot. at 4. Charter will undoubtedly be prejudiced if the Court permits Entropic to further amend its infringement contentions to assert a new theory of infringement at this stage of litigation: two months *after* the parties submitted claim construction briefs, almost one month *after* the court issued its Claim Construction Order, *after* the close of fact discovery, *after* the parties exchanged opening expert reports, within *one month* of the deadline for dispositive and *Daubert* motions, and within *four months* of the December 4, 2023 trial date.

Put simply, this case has now “entered an advanced stage: Discovery is closed, claim construction is complete, and trial draws near, looming on the horizon a mere” four months away. *Oyster Optics, LLC v. Coriant (USA) Inc.*, No. 2:16-CV-01302-JRG, 2018 WL 11448685, at *2

(E.D. Tex. Jan. 8, 2018). At this “advanced stage,” these “supplemental” contentions would “significantly prejudice” Charter. *Id.* (finding prejudice cannot be cured “at this late date”).

That is because there is no opportunity to reopen discovery or the time for Charter to submit supplemental invalidity contentions. And, “[b]y waiting until the end of discovery to amend its infringement theories, [Entropic] threatens the clear, focused path that both parties were following prior to the” motion. *Revolaze LLC v. J.C. Penney Corp., Inc.*, No. 2:19-cv-00043-JRG, 2020 WL 2220158, at *5 (E.D. Tex. May 6, 2020) (Gilstrap, J.). Had pre-equalization been previously accused, Charter would have at least sought different or additional discovery from third parties and certainly would have investigated additional prior art given that the concept was incorporated in DOCSIS 1.1 by 2005. *See, e.g.*, DOCSIS 1.1, CM-SP-RFIv1.1-C01-050907, § 4.2.6.⁷ And, had Entropic asserted this theory earlier, and it could have, Charter would have otherwise “focused” its discovery to include pre-equalization. Thus, Charter will be prejudiced if the motion is granted because it “would likely need to conduct additional discovery” and would likely need to further amend its expert reports to respond to the pre-equalization theory, which could result in continuing the trial date. *See* Section III.B.iv, *infra*; *Revolaze LLC*, 2020 WL 2220158, at *5; *Realtime Data, LLC v. Oracle Am., Inc.*, No. 6:16-cv-00088-RWS-JDL, 2016 WL 11702434, at *4 (E.D. Tex. Dec. 14, 2016) (“Coupled with Plaintiff’s lack of diligence, the fact that the parties are in the midst of expert discovery and trial is approximately six months away demonstrates that Defendant would experience at least some prejudice if Plaintiff were granted leave to supplement its contentions.”). This factor also weighs against granting the motion.

⁷Available at <https://community.cablelabs.com/wiki/plugins/servlet/cablelabs/alfresco/download?id=cb040b5d-0c22-4222-92b3-747d33427e85> (last visited Aug. 3, 2023).

4. *There is No Availability for a Continuance*

Entropic wholly ignores this factor, and does not address that this Court scheduled trial to begin in **four** months, on December 4, 2023. Fact discovery has closed, the parties have exchanged initial expert reports, and rebuttal reports are due August 11, a mere four days after Charter submits this opposition. Charter is hard-pressed to think of any scenario that would allow the parties to proceed to trial on the current schedule while simultaneously seeking discovery, conducting depositions, and possibly supplementing expert reports regarding pre-equalization,⁸ all while meeting the Court’s deadlines to file dispositive and *Daubert* motions by August 28, a week after Charter’s sur-reply in connection with this motion is due.

Charter is mindful that the Court recently extended the fact discovery deadline for limited purposes upon the parties’ representation that doing so would not extend the Court’s trial schedule. Charter is also mindful that Entropic opposed Charter’s motion to consolidate this action with related action 2:23-cv-0052 (Dkt. 99), which motion remains pending, arguing that a delay of this Court’s trial schedule “is prejudicial” to Entropic. *See* Dkt. 113 at 9-10. To permit the supplemental infringement contentions “at this time would risk, if not guarantee, further delay.” *Packet Intelligence*, 2017 WL 2531591, at *2. This factor also weighs against granting Entropic leave to further supplement contentions.

⁸ Although Entropic’s proposed supplemental infringement contentions regarding pre-equalization are not yet at issue in this case, Entropic has submitted an expert report wherein its expert opines that Charter [REDACTED]

[REDACTED].” Ex. 6, Excerpts from Expert Rep. of Dr. Souris, ¶¶ 419, 444, 499, 507. This fact, along with Entropic’s rush to file this motion without satisfying the meet and confer requirements, support an inference that Entropic is aware that there is no availability for a continuance. This fact also supports an inference that Entropic had ample time to amend its infringement theories *prior* to July 21, 2023 because the expert report, served July 21, 2023, included an analysis of this “new” theory. This begs the question of how Entropic could have learned of this “newly-available information” for the first time during a deposition on July 20, 2023, but also provided its expert with sufficient information regarding this newfound theory to issue a fully-developed opinion on July 21, 2023. Both cannot be true.

IV. CONCLUSION

Charter respectfully asks this Court to deny Entropic's motion for leave to supplement its infringement contentions.

Dated: August 7, 2023

Respectfully submitted,

/s/ Paul Margulies (with permission)

Deron R. Dacus
State Bar No. 00790553
The Dacus Firm, P.C.
821 ESE Loop 323, Suite 430
Tyler, TX 75701
Phone: (903) 705-1117
Fax: (903) 581-2543
Email: ddacus@dacusfirm.com

Daniel L. Reisner
David Benyacar
Elizabeth Long
Albert J. Boardman
Melissa Brown
Jacob Bass
ARNOLD & PORTER KAYE SCHOLER LLP
250 West 55th Street
New York, New York, 10019-9710
Telephone: (212) 836-8000
Email: daniel.reisner@arnoldporter.com
Email: david.benyacar@arnoldporter.com
Email: elizabeth.long@arnoldporter.com
Email: albert.boardman@arnoldporter.com
Email: melissa.brown@arnoldporter.com
Email: jacob.bass@arnoldporter.com

Marc A. Cohn
Amy L. DeWitt
Paul I. Margulies
ARNOLD & PORTER KAYE SCHOLER LLP
601 Massachusetts Avenue NW
Washington, DC 20001-3743
Email: marc.cohn@arnoldporter.com
Email: amy.dewitt@arnoldporter.com
Email: paul.margulies@arnoldporter.com

*Attorneys for Defendant
Charter Communications, Inc.*

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing document has been served on all counsel of record via email and the Court's ECF system on August 7, 2023.

/s/ Paul Margulies
Paul Margulies

CERTIFICATE OF AUTHORIZATION TO FILE UNDER SEAL

Pursuant to Local Rule CV-5, the undersigned counsel hereby certifies that authorization for filing under seal has been previously granted by the Court in the Protective Order (Dkt. 36) entered in this case on August 10, 2022.

/s/ Paul Margulies
Paul Margulies